Special Issue

Purinergic Signaling in Health and Disease

Message from the Guest Editor

Extracellular adenosine, adenine nucleotides and uracil nucleotides play important roles in the control of the function of cells, organs and organ systems. Adenosine activates four human G-protein-coupled receptors. P2Y receptors are G-protein-coupled receptors for adenine nucleotides and uracil nucleotides. There are eight human subtypes. P2X receptors are ligand-gated receptors for adenine nucleotides with a trimeric protein structure. Seven human P2X subtypes build these trimers. Agonists and antagonists have been developed for use in pharmacotherapy. Adenosine and analogues are used for the diagnosis and therapy of cardiovascular diseases. The P2Y2 receptor agonist diquafosol is used for the treatment of dry-eye disease. Several P2Y12 receptor antagonists inhibit platelet aggregation in the prevention and therapy of cardiovascular events such as myocardial infarction.

Guest Editor

Prof. Dr. Ivar von Kügelgen
Department of Pharmacology and Toxicology, Pharma Center, University of Bonn, Bonn, Germany

Deadline for manuscript submissions

closed (31 January 2023)

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/113089

Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

mdpi.com/journal/biomedicines

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/journal/biomedicines

MDPI

About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni
1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).